OPERATION MANAGEMENT SYSTEM FOR SECURITY DEPARTMENT
OF UNIVERSITI TEKNOLOGI MALAYSIA (OMS-UTMSD)

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SESI PENGAJIAN: 2007/2008

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OPERATION MANAGEMENT SYSTEM FOR SECURITY DEPARTMENT OF UNIVERSITI TEKNOLOGI MALAYSIA (OMS-UTMSD)

MOHAMED O. ALI ALFALET

A technical report is submitted in partial fulfillment of the requirements for the award of
Master of Science (Computer Science -Real Time Software Engineering)

Centre for Advanced Software Engineering
Faculty of Computer Science and Information System
Universiti Teknologi Malaysia

OCTOBER 2007
DECLARATION

"I declare that this Technical Report entitled 'Operation Management System for Security Department of Universiti Teknologi Malaysia (OMS, UTM/ROI)' is the result of my own research except for citations that have been duly acknowledged."

Signature

Name of Candidate : MOHAMED. O. ALI ALFALET

Date : 4 OCTOBER 2007
To my beloved parents, my wife, my kids Fatam, Rodane and Rawasi
ACKNOWLEDGEMENT

All praise due to Allah, the Most Merciful, for His love and guidance. Salute on Prophet Muhammad (peace be upon him), his family and fellow companions.

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Security Department of Universiti Teknologi Malaysia, City Campus, Kuala Lumpur is an important unit that ensures the security and safety of the institution. The department currently uses a poorly created web-based application to handle its daily tasks of surveillance, security checks and movement control. Therefore, a new system is necessary to enhance the security operations. This project developed an Operation Management System (OMS-UTMSD) with appropriate Software Engineering practice, complete with Software Requirement Specification (SRS) and Software Design Description (SDD). This project employed the Institute of Electrical and Electronics Engineering (IEEE) standards to meet the project’s objective of refining the old version to coincide with current quality requirements. This web-based application was found to be suitable for addressing most manual daily tasks. The system was reengineered to comply with Software Engineering rules the final outcome satisfies all users’ requirements, and suited to security management of staff, students, contractors and visitors. The system is capable of working round the clock (24 hours a day, 7 days a week). It now forms the backbone of the department for the generation and management of most security functions online.
ABSTRAK

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CHAPTER 1

INTRODUCTION

1.1 Organization Background

Since its establishment Universiti Teknologi Malaysia (UTM) focused on developing and improving its academic programs in the area of natural sciences and technology in the country. It contributes in research and development at both domestic and industrial scales. UTM is globally acknowledged for advancing the frontiers of human development industrially and commercially.

The university aims at producing capable men and women that would lead the society to greater height technically and scientifically. This is done through a variety of academic programs suitable for individual desires and aspirations.

UTM security department currently operates on staff strength of about 46 people, and is located on Kuala Lumpur Campus, which established was in 1975. The online system provides the department with steady growth and enhanced work efficiency.
1.2 Project Background

OMS-UTMSD is an online system that will be used by the security department to monitor students, staff, contractors and visitors. It secures via surveillance of all other departments and schools in their jurisdiction (area of operation) remotely and physically. So building this online system will help in enhancing its efficiency of work and change its business process from manual to digital.

To enhance the UTM’s mission and vision of providing in excellent quality of service to its existing stakeholders on a long-term basis, an online security management system is inevitable. As a leading department, efficient security system of the whole campus could mar or promote the university’s success.

1.3 Project Overview

The project focused on sets of manual modules of security operations. It aimed at resolving the urgent issues and increasing the awareness of security operatives. Therefore, it targeted a subset of these modules such as admin, operational management, personal management, and sticker management.
1.4   Technical Report Outline

This technical report consists of the following chapters

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